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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,535	01/16/2002	Matthew B. Hoyt	1005-188	5664

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,535

Applicant(s)

HOYT ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed November 4, 2003, has been entered. Claims 1, 2, 4, 6, and 8 have been amended, while claims 3, 5, and 9-20 are cancelled. Thus, the pending claims are 1, 2, 4, and 6-8.

2. Claim 1 has been amended to incorporate the limitations of cancelled claims 3 and 5. Said amendment is sufficient to overcome the 102 rejections set forth in section 2-5 of the last Office Action. Additionally, said amendment is sufficient to withdraw the 102/103 rejection set forth in section 7 of the last Office Action.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1 and 8 are rejected under 35 USC 103(a) as being unpatentable over US 4,069,363 issued to Segraves in view of US 5,447,794 issued to Lin.

Claims 4, 6, and 7 stand rejected under 35 USC 103(a) as being unpatentable over US 4,069,363 issued to Segraves in view of US 5,447,794 issued to Lin, as set forth in section 8 of the last Office Action.

Claims 1 and 8 were previously rejected under 102 as being anticipated by Segraves, while claims 3-7 were rejected under 103 over Segraves in view of Lin. Since claim 1 has been

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amended to incorporate the limitations of claims 3 and 5, the rejection of claims 1 and 8 has been changed from a 102 to a 103, for reasons analogous to those presented in the last Office Action.

5. Claim 2 stands rejected under 35 USC 103(a) as being unpatentable over the cited Segraves patent in view of US 4,075,378 issued to Anton or US 5,468,555 issued to Lijten, as set forth in section 10 of the last Office Action.

6. Claims 1, 2, and 8 are rejected under 35 USC 103(a) as being unpatentable over US 4,075,378 issued to Anton et al. in view of US 5,447,794 issued to Lin.

Claims 4, 6, and 7 stand rejected under 35 USC 103(a) as being unpatentable over US 4,075,378 issued to Anton et al. in view of US 5,447,794 issued to Lin, as set forth in section 8 of the last Office Action.

Claims 1, 2, and 8 were previously rejected under 102 as being anticipated by Anton, while claims 3-7 were rejected under 103 over Anton in view of Lin. Since claim 1 has been amended to incorporate the limitations of claims 3 and 5, the rejection of claims 1, 2, and 8 has been changed from a 102 to a 103, for reasons analogous to those presented in the last Office Action.

7. Claims 1, 4, and 6-8 stand rejected under 35 USC 103(a) as being unpatentable over US 5,447,794 issued to Lin in view of US 5,340,886 issued to Hoyt, and in further view of Segraves, as set forth in section 9 of the last Office Action.

8. Claim 2 stands rejected under 35 USC 103(a) as being unpatentable over the cited Lin, Hoyt, and Segraves references and in further view of the cited Anton patent or US 5,468,555 issued to Lijten, as set forth in section 10 of the last Office Action.

Response to Arguments

9. Applicant's arguments filed with the amendment have been fully considered but they are not persuasive.

10. Applicant traverses the above Segraves rejections by asserting that the reference is not concerned with providing an anti-staining sheath/core filament, but rather an asymmetrical sheath/core filament with improved crimpability (Amendment, paragraph spanning pages 5-6). This argument is unconvincing since Segraves explicitly recognizes the differential dyeability of the sheath/core filaments (col. 4, lines 16-24). Additionally, applicant asserts that Segraves' teaching of the sheath being "lighter" in color cannot be suggestive of an essentially undyed sheath, as is presently claimed (Amendment, page 6, lines 6-8). In response, it is first noted that the claim recites "*substantially* undyed by the *acid* dye." (Emphasis added.) Secondly, it is noted that Segraves teaching of a "lighter" sheath is with respect to disperse dyes. When discussing acid dyes, Segraves states that the core nylon "accepts acid dyes very readily" and when immersed in a solution of dark acid dye, "only the more readily dyeable core becomes dyed" (col. 5, lines 35-38). Thus, Segraves teaches the sheath is "substantially undyed."

11. Applicant also argues that the combination of Lin and Segraves is not suggestive of the claimed method (Amendment, page 6, 2nd paragraph). However, this argument is unpersuasive since Lin is only relied upon to teach the claimed sheath/core weight ratio, which is lacking in Segraves. It is reiterated the amine end group concentrations as claimed are met by, or obvious over, the Segraves reference. Specifically, Segraves teaches the core is easily dyeable with acid dyes, which means that amine end groups are available as dyesites (i.e., a high AEG concentration), while the sheath is substantially undyed (i.e., a low AEG concentration). If the

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Segraves polyamide does not already possess the claimed AEG concentrations, it would have been obvious to one skilled in the art to modify said concentrations in order to further enhance the differential dyeability of the bicomponent fiber. Therefore, applicant's arguments are insufficient to overcome the rejections based upon Segraves in view of Lin.

12. With respect to the Lin in view of Hoyt rejection, applicant argues that Lin's silence with respect to the AEG concentration of the sheath nylon would not lead one to search for another sheath polymer (Amendment, page 6, 3rd paragraph). The examiner respectfully disagrees that Lin's silence on the sheath AEG concentration is a teaching of its insignificance. Specifically, Lin's whole objective to is produce a stain resistant sheath/core nylon filament. Thus, one skilled in the art would be motivated to improve on the stain resistance of Lin's fiber by employing a low AEG concentration for the sheath nylon.

13. With respect to applicant's argument that the combination of Lin and Hoyt is unobvious because Hoyt employs "a *sulphonated* nylon" (Amendment, page 6, 3rd paragraph), it is asserted that this argument is unpersuasive since the present claims do not exclude the presence of sulphonated nylons. Therefore, the rejection based upon Lin in view of Hoyt is hereby maintained.

14. With respect to the Anton reference, applicant asserts said reference teaches away from the claimed invention since the range of AEG concentration for the sheath nylon is greater than the presently claimed range (Amendment, page 7, 1st paragraph). This argument is unpersuasive since said AEG concentration is recognized as a result effective variable. Decreasing the AEG concentration reduces the number of available dyesites, resulting a lightly colored or undyed,

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stain-resistant nylon, while increasing the AEG concentration results in deeply colored dyed or stainable nylon. Thus, applicant's arguments are found unconvincing.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

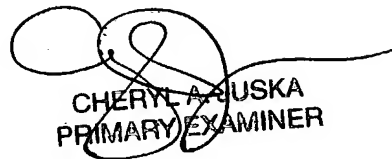
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.



CHERYL A. HUSKA
PRIMARY EXAMINER